



# Hunters Point Radiological Program Update

Hunters Point Naval Shipyard  
BCT Meeting  
January 26, 2012



# Overview



## Radiological Project Work Overview

- Current Project Map
- SS/SD Removal and Building Survey Update
  - Crisp Road
  - Parcel C
  - Parcel E 500-Series
  - Parcel D-1
- Status of Radiological RACRs
- IR-7/18 Update
- Revision of Base-wide Radiological Work Plans



# 2012 Radiological Projects





## Crisp Road/Parcel E Building and Site Surveys



Building 414

- CDPH collected confirmation samples on October 25. Awaiting free release determination following lab analysis

Site 701

- CDPH collected confirmation samples on October 25. Awaiting free release determination following lab analysis

Site 704

- CDPH collected confirmation samples on October 25. Awaiting free release determination following lab analysis

IR-04 & Site 807

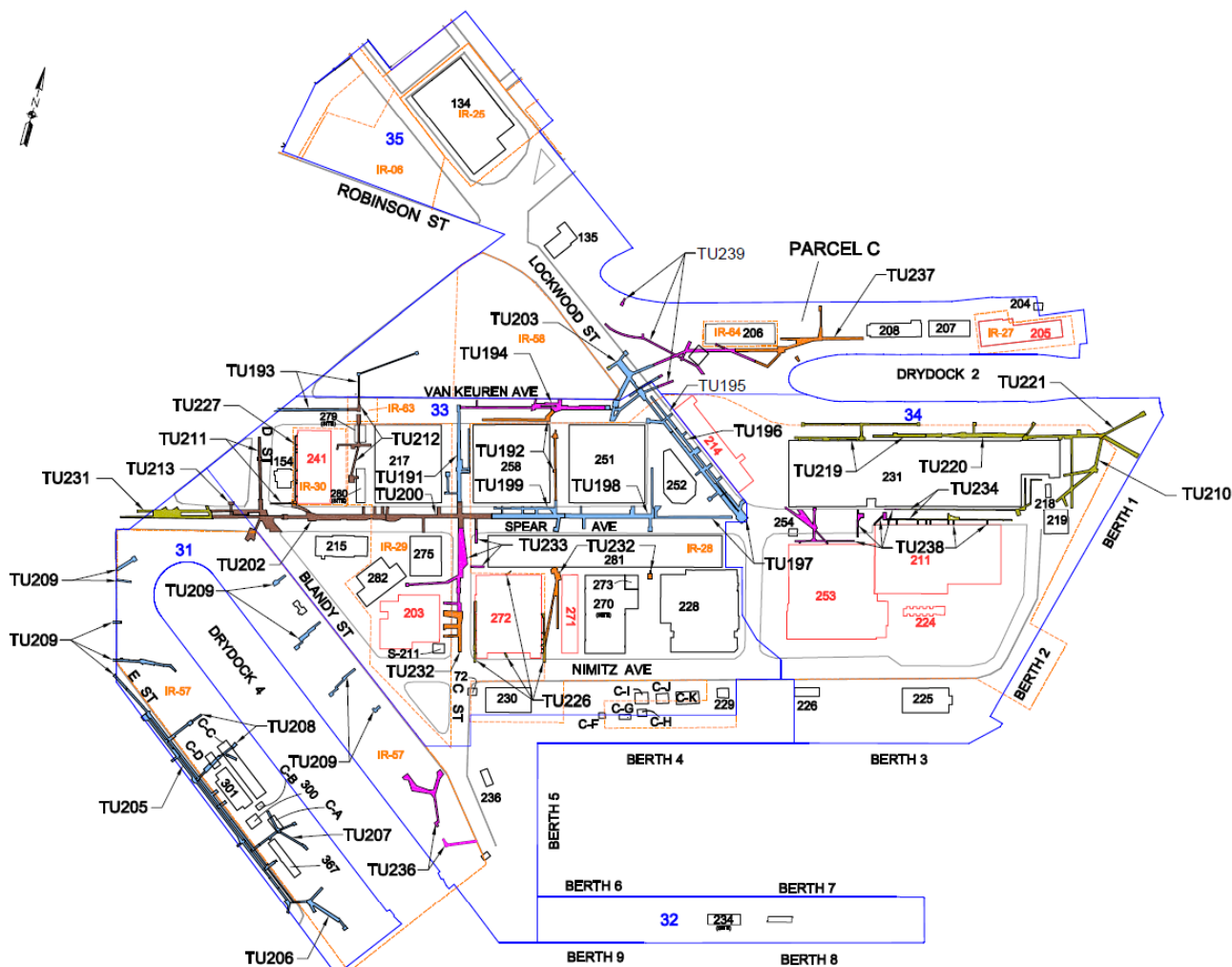
- Final anticipated February 2012

UC-3 (Crisp Rd.)  
Radiological RACR

- Final anticipated February 2012



# Parcel C Storm Drain & Sewer Removals



## LEGEND

- TU 191 - TRENCH UNIT (TU)
- 34 - WORK AREA BOUNDARY AND NUMBER
- IR-27 - IR BOUNDARY AND NUMBER
- 140 - IMPACTED BUILDING BUILDING NUMBER
- 142 - IMPACTED BUILDING FORMER BUILDING LOCATION
- 128 - NON-IMPACTED BUILDING BUILDING NUMBER
- ACTIVE TRENCH UNITS (QTY = 5)
- TRENCH UNITS THAT HAVE PASSED SYSTEMATIC SAMPLING BUT WAITING FOR OFFSITE (QTY = 4)
- TRENCH UNITS THAT HAVE PASSED OFFSITE AND SYSTEMATIC SAMPLING BUT WAITING FOR BACKFILL APPROVAL (QTY = 0)
- APPROVED FOR BACKFILL (QTY = 7)
- BACKFILLED/PAVED (QTY = 13)
- CURRENTLY BACKFILLING/PERFORMING COMPACTION (QTY = 5)



## Parcel C Storm Drain & Sewer Removals



- SS/SD line removal in Parcel C
  - Excavated soil and pipe removal through January 13, 2012:
    - 20,456 linear feet of SS/SD lines removed
      - 59% of the total 34,866 lf of Parcel C removed to date
    - 34,419 cubic yards excavated
    - 13 of 34 active Survey Units have been restored/repaved
      - Storm water swale installed along Spear Avenue





## Paving of Lockwood St and Spear Ave





## Parcel C Building and Site Surveys



Building 214

- Final FSS submitted November 2

Building 271

- Final FSS and RTCs under RASO review

North Pier

- Surveys ongoing, scan survey complete

Building 272

- Draft FSS submitted January 6

Buildings 203

- Draft FSS submitted January 5

Building 241

- Draft FSS submitted January 10





## Parcel C & E Buildings/Sites Status

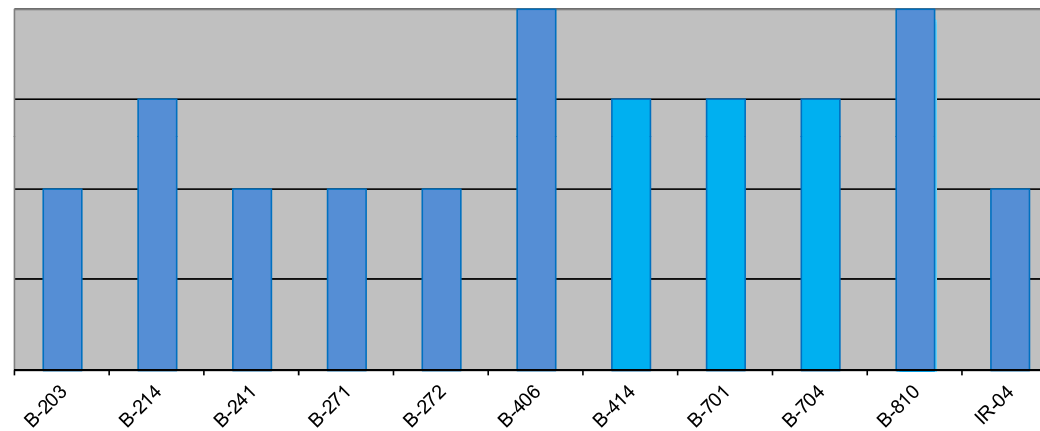


Free-Released

Final

Draft

Internal Draft  
(Data under review)

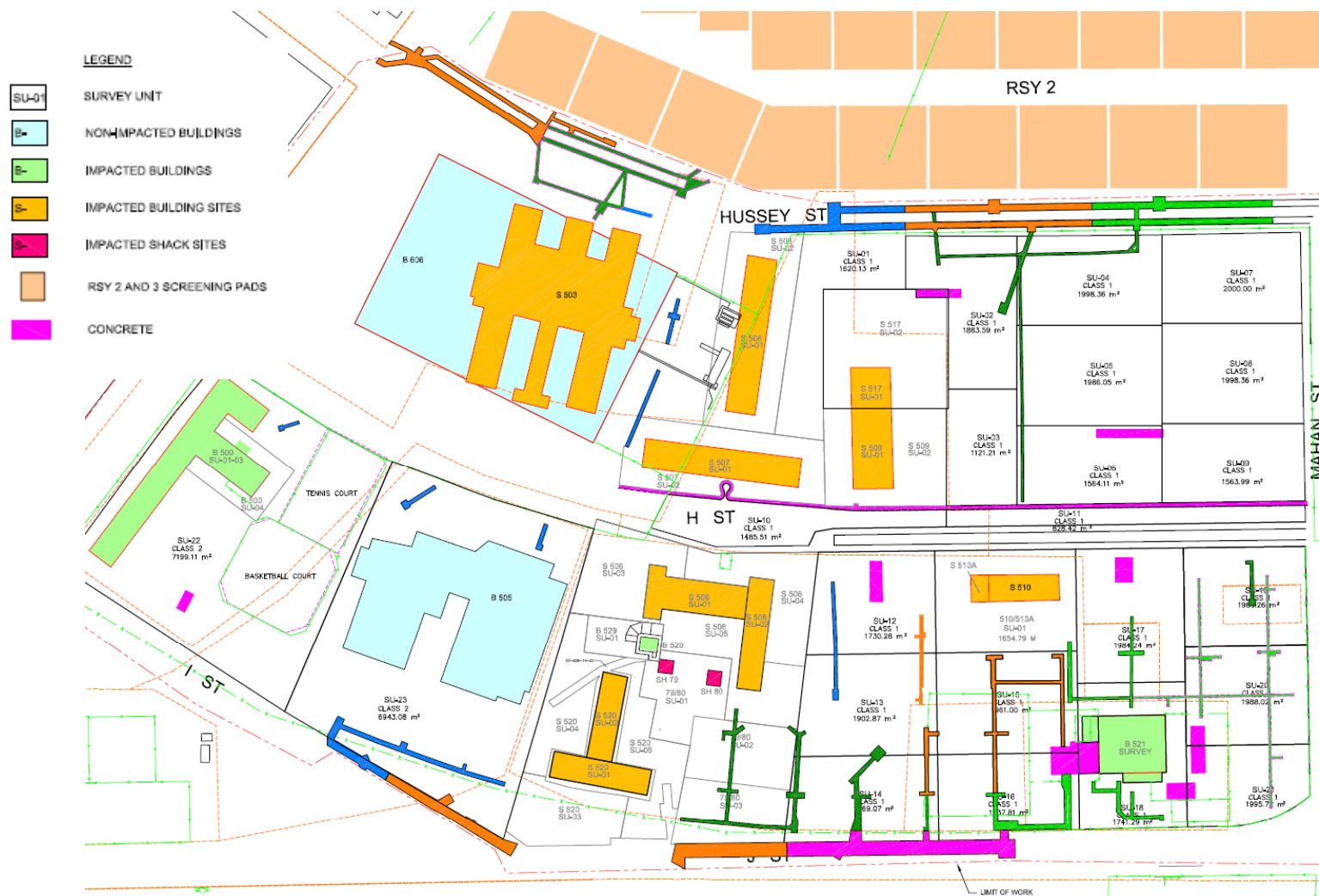


Waiting for concurrence for  
Free-Release determination





# Impacted Building and Sites Within Parcel E 500 Series Area





## Parcel E 500 Series Building Surveys



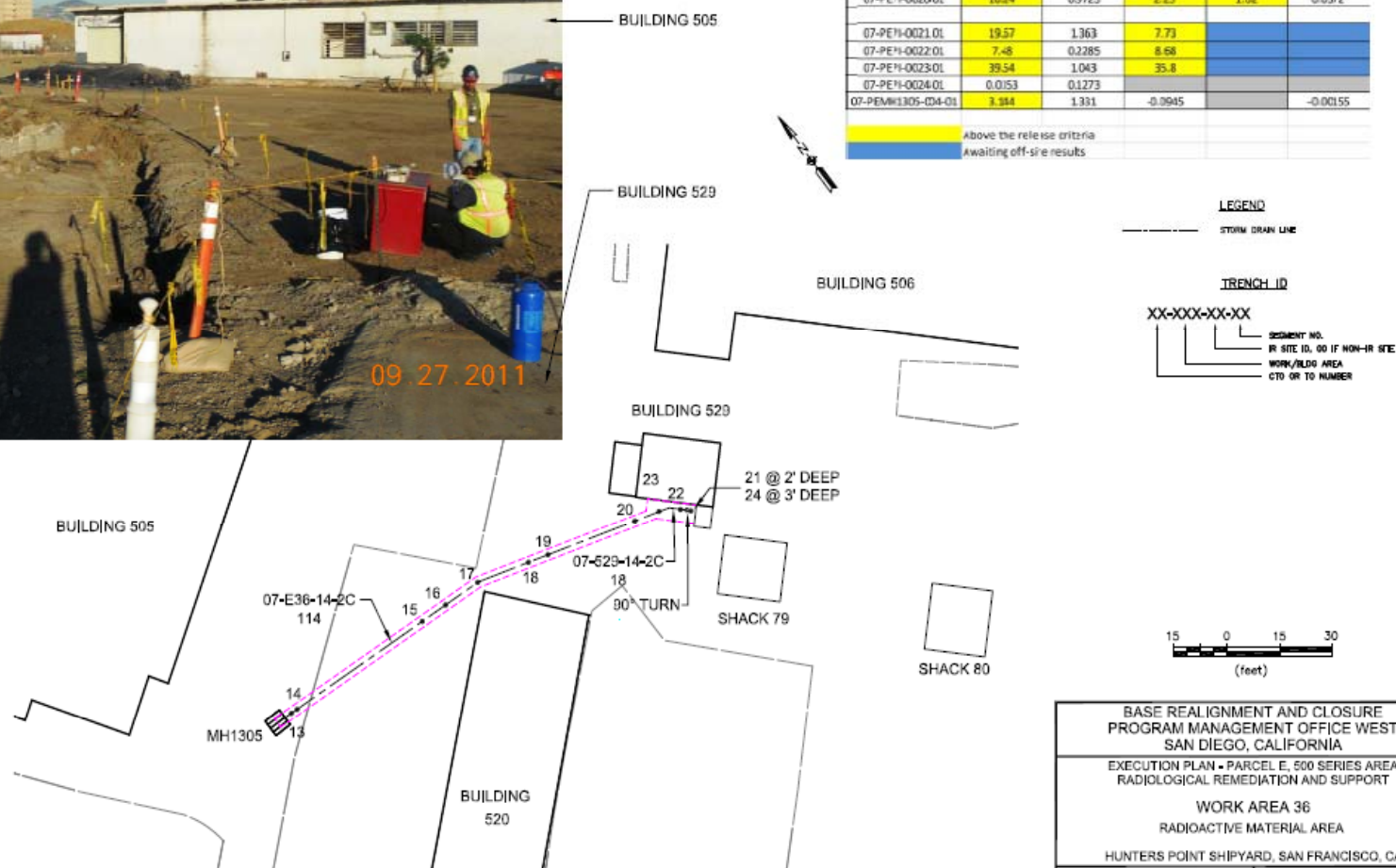
- ALL Final TSPs for Building 500 Series area completed
- Field Work
  - Building 503: Survey of 7,400 cubic yards of material is complete
  - Building 500: Survey & SS/SD line removal is complete
  - Building 521: 100% of scanning & sampling complete
  - Completed removal of the Isotope Vault
    - No contamination found on concrete surfaces of vault
    - Demolished concrete in preparation of soil survey
    - FSS of trench and vault footprint underway



# Contamination from Former Building 529 Isotope Storage Vault Drain Pipe



Sample ID	Cs-137 (pCi/g)	Ra-226 (pCi/g)	Total Sr (pCi/g)	Sr-90 (pCi/g)	Ru-239 (pCi/g)
07-PEH-0013-01	368.1	1.542	8.27	9.35	0.409
07-PEH-0014-01	33.56	2.078	13.9	13.8	0.157
07-PEH-0015-01	9.895	1.473	1.04	0.593	0.0386
07-PEH-0016-01	5.388	1.288	0.511	0.782	0.01
07-PEH-0017-01	2.362	1.126	0.639	0.55	0.0262
07-PEH-0018-01	9.467	1.255	0.306		
07-PEH-0019-01	1919	3.321	26.7	32.6	8.03
07-PEH-0020-01	10.14	0.9723	2.25	1.62	0.0372
07-PEH-0021-01	19.57	1.363	7.73		
07-PEH-0022-01	7.48	0.2285	8.68		
07-PEH-0023-01	39.54	1.043	35.8		
07-PEH-0024-01	0.0153	0.1273			
07-PEH-1305-014-01	3.184	1.331	-0.0945		-0.00155
	Above the relea criteria				
	Awaiting off-site results				







## Parcel E 500 Series Building / Site Surveys



- Field Work (continued)
  - Bldg. 509 Site: Scanning & sampling activities is complete
  - Building 506 Site: 80% of scanning & sampling is complete
  - Building 517 Site: 50% scanning & sampling is complete
  - Building 520 Site: 60% scanning & sampling is complete
  - Former Shacks 79/80 Site: 33% scanning & sampling is complete
  - Building 510/510A & 529 Sites: 10% scanning & sampling is complete
  - Building 507 Site: Commenced the removal of concrete footings



## Excavations / Surveys at Parcel E 500 Series Area



**Excavation at Former Bldg 510**



**Excavation at Former Bldg 520**



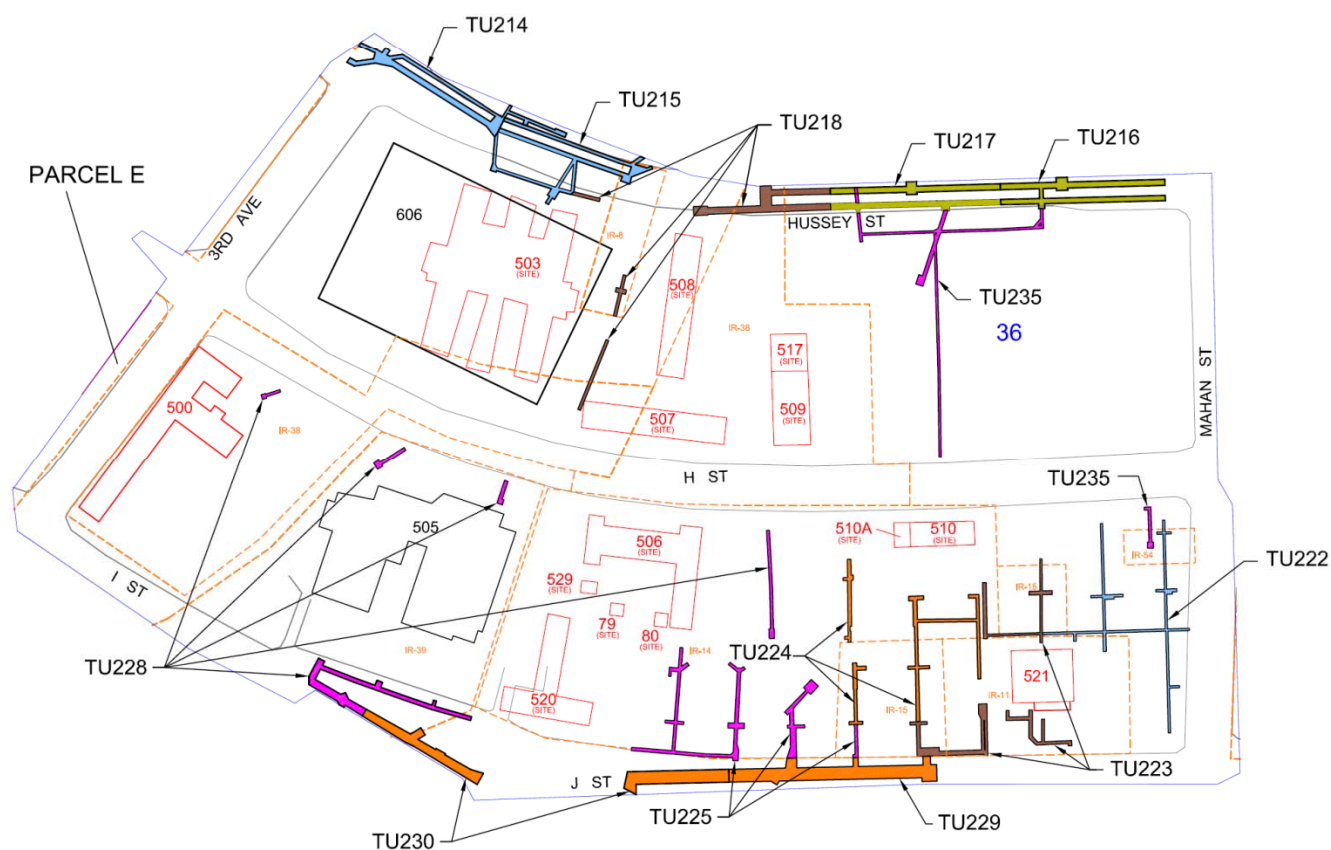
**Looking NW at 500 Series Area from Bldg 521**



**Preparation for Class 3 Survey on Roof of Bldg 521**



# Parcel E Storm Drain & Sewer Removals



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- 142 - IMPACTED BUILDING FORMER BUILDING LOCATION
- 128 - NON-IMPACTED BUILDING BUILDING NUMBER
- ACTIVE SURVEY UNITS (QTY = 3)
- SURVEY UNITS THAT HAVE PASSED SYSTEMATIC SAMPLING BUT WAITING FOR OFFSITE (QTY = 3)
- SURVEY UNITS THAT HAVE PASSED OFFSITE AND SYSTEMATIC SAMPLING BUT WAITING FOR BACKFILL APPROVAL (QTY = 0)
- APPROVED FOR BACKFILL (QTY = 2)
- BACKFILLED/PAVED (QTY = 3)
- CURRENTLY BACKFILLING/PERFORMING COMPACTION (QTY = 2)





## Parcel E 500 Series Storm Drain & Sewer Removals



- SS/SD line removal in Parcel E 500 Series
  - Excavated soil and pipe removal through January 13, 2012:
    - 8,806 linear feet of SS/SD lines removed (500 Series only)
      - 28% of the 58,000 Parcel E SS/SD lines removed to date
    - 19,224 cubic yards excavated
    - 3 of 13 active Survey Units have been restored





## Parcel D-1 Current Field Work Status



- Gun Mole Pier
  - Survey unit analytical data received for 74 of 74 SUs.
    - 46 Survey Units FSS data below project release criteria
  - Currently Remediating 4 impacted SUs for Cs-137
  - Buffer area SU 74 screening results below release criteria.
  - Developing plan for survey of concrete foundations and other concrete structures



## Parcel D-1 Current Field Work Status



- South Pier
  - Completed survey and sampling for 14 of 14 Survey Units
    - Completed remediation for 7 impacted SUs
    - 13 Survey Units FSS data below project release criteria
    - Awaiting final analytical results SU 14 Buffer Area
  - Developing plan for survey of concrete foundation and other concrete structures
- Building 274
  - Reviewing internal draft FSS Report prior to SS/SD removal beneath building
- Building 383 Area
  - Completed survey & sampling; no detections above the action levels.
  - Plan to remove remaining footer foundation, survey and sample



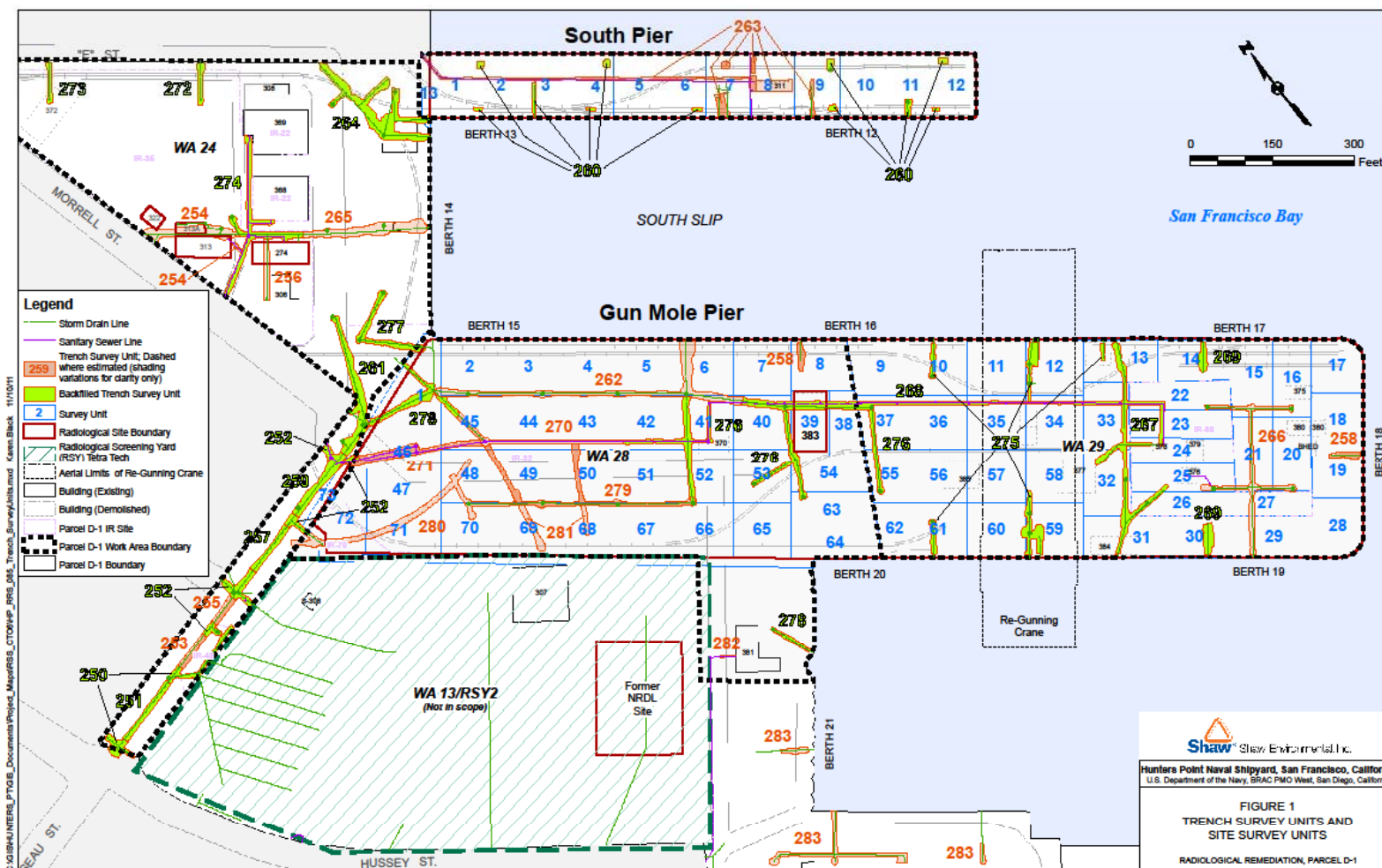
## Parcel D-1 Current Field Work Status



- Building 313,313A & 322 sites - Surveyed and Sampled
  - Remediation of impacted SUs complete and final systematic samples analysis all below the release criteria
  - Developing internal draft FSS Report
- Storm Drain and Sanitary Sewer Removal
  - 99% complete (1 Survey Unit remains to excavate)
  - Completed trench backfill on 23 SUs (68% overall complete)
  - Continue to remediate SU 265 and 254
  - Drainage Swale construction on Manseau completed in December
  - Preparing 3 Draft SUPR Packages for submittal to Regulators
    - One package scheduled for end of January
    - Two packages scheduled in February



# Parcel D-1 Project Map







# Status of Radiological RACRs



- Draft **Parcel B** Rad RACR issued October 2011
  - Received CDPH "no further comments" memo on Draft Parcel B RACR
  - Received B-140 Discharge Channel free release letter
  - Awaiting acceptance of Building 140 Technical Memorandum (Infrastructure)
- Draft **Parcel UC-3** Rad RACR issued November 2011
  - Final Parcel UC-3 Rad RACR & RTC's to be issued February 2012
- Final **Parcel D-2** Rad RACR (Rev.2) issued December 2011
  - RACR was revised to add updated SUPRs
  - Received DTSC and EPA concurrence
  - Awaiting free release letter from CDPH
- Final **Parcel G** Rad RACR was issued December 2011
  - Received DTSC concurrence; awaiting free release letter from EPA, CDPH
  - Received CDPH "no further comments" memo on Draft Parcel G RACR
- Final **Parcel UC-1&2** Rad RACR
  - Free Released



## IR-7/18 Modeling Update



- Received CDPH-RHB comments on the September 1, 2011 Revised Risk and Dose Modeling on December 14
  - Navy to respond to comments
  - No additional sampling requested by CDPH



# Radiological Management Plan



- What is the Radiological Management Plan (RadMP)?
  - Formerly, two major over-arching RAD Work Plans
    - "Sewer Plan" - Base-wide Storm Drain and Sanitary Sewer Removal Work Plan Rev 4 (2010)
    - "Building Plan" - Base-wide Radiological Work Plan Rev 1 (2007)
  - Base-wide Radiological Work Plan Rev 1 and Base-wide Storm Drain and Sanitary Sewer Removal Work Plan Rev 4 had become outdated
    - Multiple radiological contractors on base
    - SAPs and site specific plans now in project specific Execution Plans
    - Response to regulator comments
  - A new Radiological Management Plan was developed to preserve and update the relevant portions of the Base-wide Work Plans and move site specific plans to Project Execution Plans.



## Radiological Management Plan



- Base-wide Radiological Work Plan Rev 1 and Base-wide Storm Drain (2007) and Sanitary Sewer Removal Work Plan Rev 4 (2010) had become outdated
  - Both plans were written prior to TtEC invoking it's NRC License
  - TtEC has updated several relevant Radiological SOP's
  - The use of peripheral pads has been discontinued
  - Did not reflect changes agreed to during development of the SUPRs
  - Contained outdated SAP's
  - Did not reflect recent changes related to SWPPP requirements
  - Did not include the updated BW Dust Control Plan
  - Were redundant in discussing radiological surveys
  - Additional RSYs had been constructed
- The Plans were no longer a true Basewide Radiological Plans as other contractors were required to implement their site specific work Plans based on existing plans.
  - New plan called "Execution Plan" was then created as a site specific work plan
    - Referenced pre-approved work plans



## Radiological Management Plan



- In January 2011, Navy issued the Final Execution Plan, Basewide Radiological Support (Lab and RSY contract)
- Execution Plan Includes:
  - Site specific information such as: RSY and on-site lab operations, dust control, air monitoring, spill prevention, response, and reporting; SWPPP measures, waste management & QC requirements.
  - Sampling and Analysis Plan
- The SAP contained significant changes related to new gamma spec lab
  - Implemented in January 2011





## Radiological Management Plan



- **CDPH commented on the CTO-04 Execution Plan (January 2011)**  
“CDPH does not concur with this document and it appears to be inconsistent with other work plans that it cites as being applicable and still in use. Therefore, it appears that work being done now may be performed inconsistently with other work plans that BRAC has approved.”
  - Presented a question as to which SAP was to be followed
  - Revealed redundancies in Execution and Base-wide Work Plans
  - Solution at time of comment was to revise the SAP in the base-wide plans, however the text portion of the plans have never been updated since originally written
    - All previous revisions were SAP revisions



## Radiological Management Plan



The Navy decided to develop the RadMP, rather than revise the existing Work Plans

- The RadMP would combine the Base-wide Plans and reflect updates to radiological processes and lessons learned over the past six years
  - Workers in field needed updated “work plan”
- Removed the SAP
  - Added SAP to project specific Execution Plans
- Site specific plans (i.e SWPPP, dust control, waste management plan) contained in both of the Base-wide plans considered obsolete and moved to project specific work plan

Does the BCT want to review this document prior to issuing Final?



Comments, Questions, Concerns ???